

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kenneth Beaman
Appl. No.: 10/774,708
Conf. No.: 9549
Filed: February 9, 2004
Title: COMPOSITIONS AND METHOD TO MODULATE IMMUNE AND
INFLAMMATORY RESPONSES
Art Unit: Unknown
Examiner: Unknown
Docket No.: 112461-021

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 37 C.F.R. 1.97, and 37 C.F.R. 1.98, Applicants request that a citation and examination of the references cited below, and on the attached PTO-1449 form, be made during the course of examination of the above-identified application for United States patent. Pursuant to the Official Gazette Notice dated August 5, 2003, copies of the cited U.S. patents and patent applications are not included as this application was filed after June 30, 2003. However, copies of all other cited references are included with this form.

U.S. PATENT DOCUMENTS

<u>Document No.</u>	<u>Date</u>	<u>Inventor</u>
5,196,526	March 23, 1993	Beaman
6,133,434	October 17, 2000	Buell et al.
6,524,825	February 25, 2003	Mizzen et al.

FOREIGN PATENT DOCUMENTS

<u>Document No.</u>	<u>Date</u>	<u>Country</u>
WO 95/33048	December 7, 1995	PCT

OTHER DOCUMENTS

Boomer, J.S., et al., *Regeneration and tolerance factor is expressed during T-lymphocyte activation and plays a role in apoptosis*. Hum Immunol, 2001. 62(6): p. 577-88.

Boomer, J.S., et al., *Regeneration and tolerance factor's potential role in T-cell activation and apoptosis*. Hum Immunol, 2000. 61(10): p. 959-71.

DuChateau, B.K., et al. *Increased expression of regeneration and tolerance factor in individuals with human immunodeficiency virus infection*. Clin. Diagn. Lab Immunol., 1999 March. 6(2): 193-8. Abstract

Filippini, A., et al., *Ecto-ATPase activity in cytolytic T-lymphocytes. Protection from the cytolytic effects of extracellular ATP*. J Biol Chem, 1990. 265(1): p. 334-40.

Gargett, C.E., J.E. Cornish, and J.S. Wiley, *ATP, a partial agonist for the P2Z receptor of human lymphocytes*. Br J Pharmacol, 1997. 122(5): p. 911-7.

Granstein, R., *The skinny on CD39 in immunity and inflammation*. Nature Medicine, April, 2002. Vol. 8, No. 4: p.336-338.

Labasi JM, P.N., Donovan C, McCurdy S, Lira P, Payette MM, Brissette W, Wicks JR, Audoly L, Gabel CA., *Absence of the P2X7 receptor alters leukocyte function and attenuates an inflammatory response*. J Immunol, 2002. 168(12)(Jun 15): p. 6436-45.

Lee, C. et al., *Cloning of a cDNA for a T Cell Produced Molecule with a Putative Immune Regulatory Role*. Molecular Immunology, 1990. Vol. 27, No. 11, p.1137-1144.

Lee, G. W., Boomer, J.S., Gilman-Sachs, A., Chedid A., Gudelj, L., Rukavina, D. and Beaman, K. D. *Regeneration and tolerance factor of the human placenta induces IL-10 induction*. Eur J Immunol, 2001. 31: p. 687-691.

Mandal, M. and K.D. Beaman, *Purification and Characterization of a Pregnancy-Associated Protein: TJ6s*. AJRI, 1995. 33:60-67.

Mizumoto, N., et al., *CD39 is the dominant Langerhans cell-associated ecto-NTPDase: modulatory roles in inflammation and immune responsiveness*. Nat Med, 2002. 8(4): p. 358-65.

Pizzo, P., et al., *Extracellular ATP causes lysis of mouse thymocytes and activates a plasma membrane ion channel*. Biochem. J., 1991. 274: p. 139-144.

Rodriguez, A., et al., *Lysosomes Behave as Ca^{2+} -regulated Exocytic Vesicles in Fibroblasts and Epithelial Cells*. The Journal of Cell Biology, 1997. Vol. 137: p. 93-103.

Toyomura, T., et al., *Three subunit α isoforms of mouse vacuolar H(+)-ATPase. Preferential expression of the $\alpha 3$ isoform during osteoclast differentiation*. J Biol Chem, 2000. 275(12): p. 8760-5.

Wiley, J.S., et al. *Partial agonists and antagonists reveal a second permeability state of human lymphocyte P2Z/P2X7 channel*. The American Physiological Society, 1998. C1224-C1232.

Wiley et al., *The P_{2z}-purinoceptor of human lymphocytes: actions of nucleotide agonists and irreversible inhibition by oxidized ATP. Br. J. Pharmacol. 1994 112, 946-950.*

Applicants look forward to early and favorable consideration of this matter.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



Ted J. Barthel

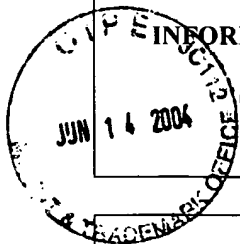
Reg. No. 48,769

P.O. Box 1135

Chicago, Illinois 60690-1135

Phone: (312) 578-6846

Dated: June 9, 2004



INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) PTO Form 1449	Atty Docket No. 112461-021	Application No. 10/774,708
	Applicant Kenneth Beaman	
	Filing Date February 9, 2004	Group Unknown

U.S. PATENT DOCUMENTS							
Examiner's Initials		Document Number	Publication Date	Inventor	Class	Subclass	Filing Date If Appropriate
		5,196,526	March 23, 1993	Beaman			
		6,133,434	October 17, 2000	Buell et al.			
		6,524,825	February 25, 2003	Mizzen et al.			

FOREIGN PATENT DOCUMENTS								
Examiner's Initials		Document Number	Publication Date	Country	Class	Subclass	Translation	
							Yes	No
		WO 95/33048	December 7, 1995	PCT				

Examiner's Initials	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Boomer, J.S., et al., Regeneration and tolerance factor is expressed during T-lymphocyte activation and plays a role in apoptosis. Hum Immunol, 2001. 62(6): p. 577-88.
	Boomer, J.S., et al., Regeneration and tolerance factor's potential role in T-cell activation and apoptosis. Hum Immunol, 2000. 61(10): p. 959-71.
	DuChateau, B.K., et al. Increased expression of regeneration and tolerance factor in individuals with human immunodeficiency virus infection. Clin. Diagn. Lab Immunol., 1999 March. 6(2): 193-8. Abstract
	Filippini, A., et al., Ecto-ATPase activity in cytolytic T-lymphocytes. Protection from the cytolytic effects of extracellular ATP. J Biol Chem, 1990. 265(1): p. 334-40.
	Gargett, C.E., J.E. Cornish, and J.S. Wiley, ATP, a partial agonist for the P2Z receptor of human lymphocytes. Br J Pharmacol, 1997. 122(5): p. 911-7.
	Granstein, R., The skinny on CD39 in immunity and inflammation. Nature Medicine, April, 2002. Vol. 8, No. 4: p.336-338.

Examiner:	Date Considered:
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) PTO Form 1449	Atty Docket No. 112461-021	Application No. 10/774,708
	Applicant Kenneth Beaman	
	Filing Date February 9, 2004	Group Unknown

Examiner's Initials	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Labasi JM, P.N., Donovan C, McCurdy S, Lira P, Payette MM, Brissette W, Wicks JR, Audoly L, Gabel CA., <i>Absence of the P2X7 receptor alters leukocyte function and attenuates an inflammatory response.</i> J Immunol, 2002. 168(12)(Jun 15): p. 6436-45.
	Lee, C. et al., <i>Cloning of a cDNA for a T Cell Produced Molecule with a Putative Immune Regulatory Role.</i> Molecular Immunology, 1990. Vol. 27, No. 11, p.1137-1144.
	Lee, G. W., Boomer, J.S., Gilman-Sachs, A., Chedid A., Gudelj, L., Rukavina, D. and Beaman, K. D. <i>Regeneration and tolerance factor of the human placenta induces IL-10 induction.</i> Eur J Immunol, 2001. 31: p. 687-691.
	Mandal, M. and K.D. Beaman, <i>Purification and Characterization of a Pregnancy-Associated Protein: TJ6s.</i> AJRI, 1995. 33:60-67.
	Mizumoto, N., et al., <i>CD39 is the dominant Langerhans cell-associated ecto-NTPDase: modulatory roles in inflammation and immune responsiveness.</i> Nat Med, 2002. 8(4): p. 358-65.
	Pizzo, P., et al., <i>Extracellular ATP causes lysis of mouse thymocytes and activates a plasma membrane ion channel.</i> Biochem. J., 1991. 274: p. 139-144.
	Rodriguez, A., et al., <i>Lysosomes Behave as Ca²⁺-regulated Exocytic Vesicles in Fibroblasts and Epithelial Cells.</i> The Journal of Cell Biology, 1997. Vol. 137: p. 93-103.
	Toyomura, T., et al., <i>Three subunit a isoforms of mouse vacuolar H(+)-ATPase. Preferential expression of the a3 isoform during osteoclast differentiation.</i> J Biol Chem, 2000. 275(12): p. 8760-5.
	Wiley, J.S., et al. <i>Partial agonists and antagonists reveal a second permeability state of human lymphocyte P2Z/P2X7 channel.</i> The American Physiological Society, 1998. C1224-C1232.
	Wiley et al., <i>The P_{2z}-purinoceptor of human lymphocytes: actions of nucleotide agonists and irreversible inhibition by oxidized ATP.</i> Br. J. Pharmacol. 1994 112, 946-950.

Examiner:	Date Considered:
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

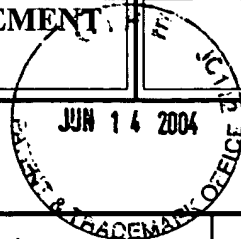
ifw

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))			Docket No. 112461-21	
In Re Application Of: Kenneth Beaman				
Serial No. 10/774,708	Filing Date February 9, 2004	Examiner Unknown	Group Art Unit Unknown	
Title: COMPOSITIONS AND METHOD TO MODULATE IMMUNE AND INFLAMMATORY RESPONSES				
<p>Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450</p> <p>37 CFR 1.97(b)</p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p>37 CFR 1.97(c)</p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p>OR</p> <p><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>				

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.
112461-21

In Re Application: **Kenneth Beaman**



Serial No.

10/774,708

Filing Date

February 9, 2004

Examiner

Unknown

Group Art Unit

Unknown

COMPOSITIONS AND METHOD TO MODULATE IMMUNE AND INFLAMMATORY

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of _____ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **02-1818** as described below.
- ☐ Charge the amount of _____
- ☐ Credit any overpayment.
- ☒ Charge any additional fee required.

Certificate of Transmission by Facsimile*

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (F:

(Date)

Signature

Typed or Printed Name of Person Signing Certificate

Certificate of Mailing by First Class Mail

I certify that this document and fee is being deposited on June 9, 2004 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature of Person Mailing Correspondence

Renee Street

Typed or Printed Name of Person Mailing Certificate

*This certificate may only be used if paying by deposit account.

Signature

Dated: **June 9, 2004**

Ted J. Barthel
Reg. No. 48,769
P.O. Box 1135
Chicago, IL 60690-1135
Phone: 312-578-6846

CC: